

RBI

Belt-Over Roller Incline Conveyor



The model RBI is a floor-to-floor incline conveyor. It is equipped with an adjustable double nose-over at the discharge end to ensure a smooth transfer from the incline to horizontal plane. Inclines are easily adjusted up to 30 degrees. This conveyor can also be used as a booster conveyor in gravity flow systems.

- 12 Belt Widths
- Center Drive
- Reversible
- Brake Motor
- System Ends
- Double Nose-over
- Pop-Out Roller
- Powered Feeder
- Ceiling Hangers Available
- Adjustable MS-Type Floor Supports Available
- Undertrussing Available

TECHNICAL MANUAL

Size to Order Overall Length "A"	Bed Length "L"	"B" @ 25°	Infeed @ 30 1/2°	Discharge @ 30 1/2°	Belth Width	"H" @ 25°											
						13"	15"	17"	19"	21"	23"	25"	27"	31"	33"	37"	39"
4" Dia. Pulley	Between Rail Width	Overall Frame Width	Size to Order OAL "A" 6" Dia. Pulley	24"	28"	30"	34"	36"	40"	42"							
13' 10"	10'	12' 8"	4' 11"		886	941	996	1051	1106	1161	1216	14'	1305	1457	1533	1685	1761
15' 10"	12'	14' 7"	5' 8"		914	971	1028	1085	1142	1199	1256	16'	1347	1503	1581	1737	1815
17' 10"	14'	16' 5"	6' 4"		942	1001	1060	1119	1178	1237	1296	18'	1389	1549	1629	1789	1869
19' 10"	16'	18' 3"	7' 2"		970	1031	1092	1153	1214	1275	1336	20'	1431	1595	1677	1841	1923
21' 10"	18'	20' 1"	8' 0"		998	1061	1124	1187	1250	1313	1376	22'	1473	1641	1725	1893	1977
23' 10"	20'	21' 11"	8' 10"		1026	1091	1156	1221	1286	1351	1416	24'	1515	1687	1773	1945	2031
25' 10"	22'	24' 8"	10' 0"		1054	1121	1188	1255	1322	1389	1456	22'	1557	1733	1821	1997	2085
27' 10"	24'	25' 6"	10' 6"	Weights (lbs.)	1082	1151	1220	1289	1358	1427	1496	28'	1599	1779	1869	2049	2139
29' 10"	26'	27' 4"	11' 5"		1110	1181	1252	1323	1394	1465	1536	30'	1641	1825	1917	2101	2193
31' 10"	28'	29' 2"	12' 5"		1138	1211	1284	1357	1430	1503	1576	32'	1683	1871	1965	2153	2247
33' 10"	30'	31' 0"	13' 1"		1166	1241	1316	1391	1466	1541	1616	34'	1725	1917	2013	2205	2301
35' 10"	32'	33' 10"	14' 0"		1194	1271	1348	1425	1502	1579	1656	32'	1767	1963	2061	2257	2355
37' 10"	34'	34' 8"	14' 7"		1222	1301	1380	1459	1538	1617	1696	38'	1809	2009	2109	2309	2409
39' 10"	36'	36' 5"	15' 7"		1250	1331	1412	1493	1574	1655	1736	40'	1851	2055	2157	2361	2463
41' 10"	38'	38' 2"	16' 6"		1278	1361	1444	1527	1610	1693	1776	42'	1893	2101	2205	2413	2517
43' 10"	40'	40' 0"	17' 4"		1306	1391	1476	1561	1646	1731	1816	44'	1935	2147	2253	2465	2571

Note: All weights in catalog are conveyor weights only. Accessories, crating, etc., are not included.



Standard Specifications

BELT – High-Grip Longitudinal Grooved. Clipper lacing.

BED – Roller bed with 1.9 in. dia. roller x 16 ga. galvanized tube spaced every 6 in. Mounted in 6 1/2 in. x 12 ga. powder-painted, formed steel channel frame. Standard 4 ft., 6 ft., 8 ft., and 10 ft. long sections bolt together with splice plates.

CROSS BRACING – Rods with turnbuckles are fastened to underside of bed to provide proper alignment of bed rollers and ensure correct product tracking. Supplied to section adjoining drive and every other section, 20 ft. bed lengths and over. Supplied on bed lengths 9 ft. and over.

DOUBLE NOSE-OVER – A 26 in. long horizontal and a 12 in. long nose-over section provides a two-step transition of product from incline to horizontal. Provides up to 30 degree incline adjustment.

LOW POWERED FEEDER – Chain type driven from tail pulley of inclined conveyor. Supports not included in base price.

CENTER DRIVE – Located on the incline section. Chain guard located on left hand side.

DRIVE PULLEY – 8 in. dia. with 1 7/16 in. dia. shaft at bearings, fully lagged.

TAIL PULLEY – 4 in. dia. with 1 in. dia. shaft at bearings or 6 in. dia. with 1 3/16 in. dia. shaft at bearings; machine crowned.

TAKE-UP PULLEY – 4 6 in. dia. with 1 3/16 in. dia. shaft at bearings; machine crowned.

TAKE-UP – Take-ups in center drive provide 16 in. of belt take-up.

SNUB IDLER/NOSE-OVER ROLLERS – Adjustable 2 1/8 in. dia. or 2 1/2 in. dia. pre-lubricated ball bearings. Snub guards included.

RETURN IDLER – Adjustable 1.9 in. dia., pre-lubricated ball bearings.

BEARINGS – Sealed, pre-lubricated, self-aligning ball bearings on drive, tail, and take-up pulley.

SPEED REDUCTION – Sealed worm gear C-face speed reducer. No. 50 roller chain to drive pulley.

MOTOR – 1 HP, 208/230/460/575V, 3 Ph. 60 Hz. Totally enclosed C-face SSB Brake Motor (6 ft./lb.).

BELT SPEED – Constant 65 FPM.

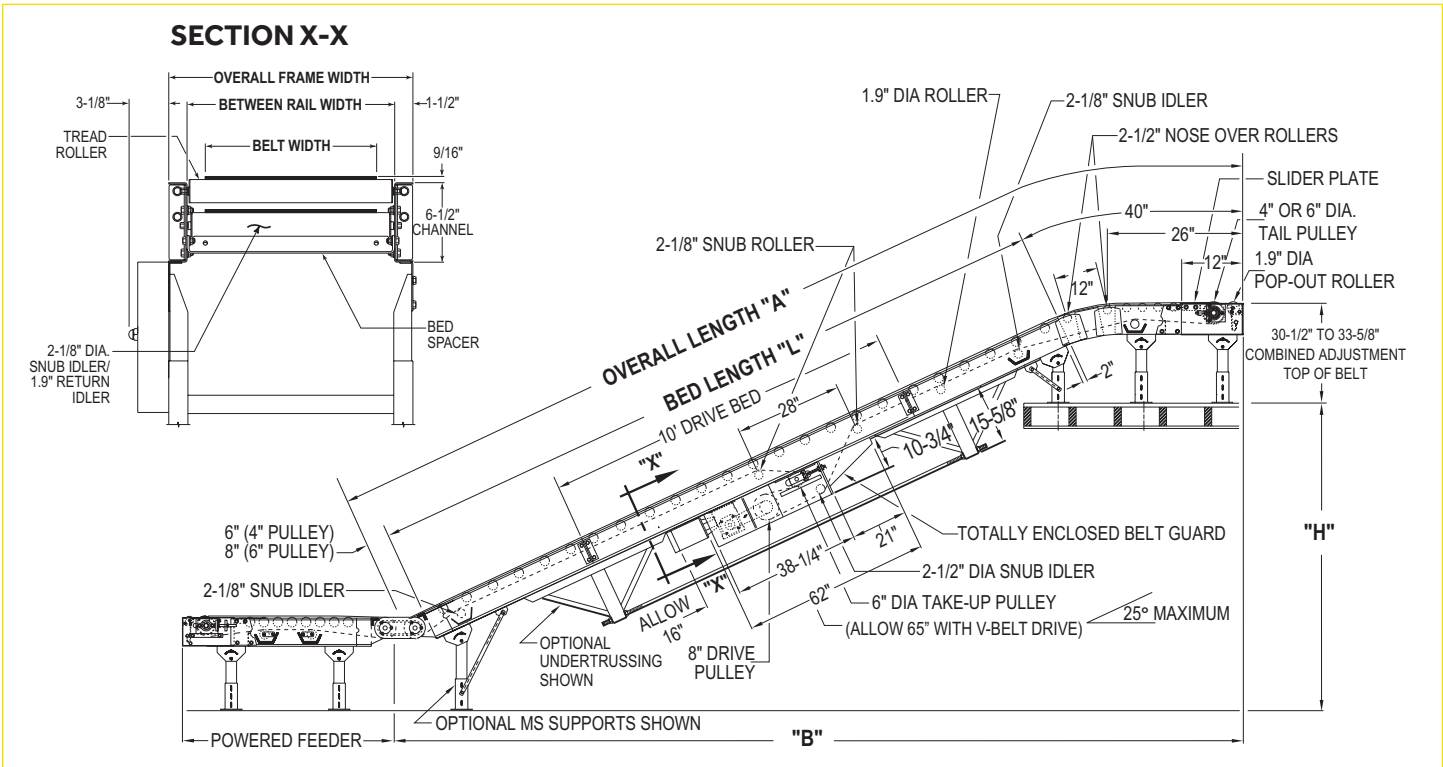
CAPACITY – Maximum load per linear foot of conveyor 225 lbs. NOT TO EXCEED capacity in charts.

FLOOR SUPPORTS – Supplied as optional equipment.

BR	Belt Width	OAW	Feeder Length
13"	10"	16"	35 1/2"
15"	12"	18"	
17"	14"	20"	
19"	16"	22"	50 1/2"
21"	18"	24"	
23"	20"	26"	
25"	22"	28"	67 1/2"
27"	24"	30"	
31"	28"	34"	
33"	30"	36"	79 1/2"
37"	34"	40"	
39"	36"	42"	

Load Capacity Chart			
25° Incline @ 65 FPM W/High-Grip BELT			
Lengths Up To			
HP	Belt Widths To	14'	44'
		Distributed Load (lbs.)	
1	22"	605	585
	30"	595	565
	36"	585	545
2	22"	1245	1225
	30"	1235	1205
	36"	1225	1185

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Optional Equipment

FLOOR SUPPORTS – MS Type floor supports are available with a wide range of adjustment. Specify top of belt or roller elevation. One support required at every bed joint and ends of conveyor. Holes in feet for lagging to floor. Knee braces recommended above MS-3 support.

BELT – Black Trackmate 120 Roughtop with PVC Cover, Brown Polymate Roughtop w/Nitrile cover, Pure Gum Rubber Roughtop.

BELT SPEED – Other constant and variable speeds v-belt drive supplied on speeds under 20 FPM (1 HP)–46 FPM (2 HP). Note: Capacity affected with speed change.

V-BELT DRIVE – V-belt supplied between motor and reducer. Allow 65 in.

O-RING DRIVE CHAIN – With sealed-in lubricant (recommended for applications that do not permit regular lubrication).

GUARD RAILS – Adjustable Universal Channel Guard Rail, overlapping fixed channel (one direction), non-overlapping fixed channel (bi-directional).

ROLLER CENTERS – Tread rollers spaced on 3 in., 9 in., or 12 in. centers.

PULLEYS – 6 in. dia. tail pulley with 1 3/16 in. dia. shaft at bearings in place of 4 in. when not furnished as standard.

CEILING HANGER – 5/8 in. dia. x 8 ft. long unplated rods fully threaded. Other lengths and galvanized rods available.

UNDERTRUSSING – Available in place of ceiling hangers. Maximum bed length 40 ft. Maximum overall width 30 in.

MOTOR – Energy efficient, single phase, other characteristics. 2 HP maximum.

ELECTRICAL CONTROLS – Non-reversing and reversible magnetic starters and push button stations. AC variable frequency drive.